MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

Siplast, Inc.
1111 Highway 67 South
Arkadelphia, AR 71923

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (in Miami-Dade County) and/or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Siplast Liquid Applied Roofing Systems over Steel Decks

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA No.15-0714.13 and consists of pages 1 through 9.
The submitted documentation was reviewed by Gaspar J Rodriguez.

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Liquid Applied Roof Sytems
Material PMMA
Deck Type: Steel
Maximum Design Pressure: **–150 psf.**

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
Parapro Roof Membrane Resin	20–kg Drums	Proprietary	Multi–component PMMA resin.
Pro Fleece	12”x 16.5’ roll 12”x 82’ roll 25”x 164’ roll 41”x 164’ roll	Proprietary	Non–woven, needle punched, polyester fabric reinforcement.
Pro Primer R Resin	5–kg & 10–kg Drums	Proprietary	PMMA primer component for use over BUR, modified bitumen or other soft substrates.
Pro Catalyst Powder	Box of 10 3.2oz bags	Proprietary	Reactive agent for use during priming and membrane application.
Pro Color Finish Resin	5–kg & 10–kg Drums	Proprietary	Color pigmented, multi component, flexible PMMA.
Paradiene 20 TG P	3.28’ x 50’	ASTM D6163	Asphalt elastomer sheet with random fiberglass mat reinforcement for use as a base ply in torch.
Paradiene 20 PR	3.28’ x 33.5’	ASTM D6164	Heavy duty asphalt elastomer sheet with fiberglass scrim reinforcement for use as a base ply.
Para–Stik Insulation Adhesive	30 lb pressurized cylinders	N/A	A single component moisture curing urethane foam adhesive.

APPROVED INSULATIONS:

TABLE 2

Product	Description	Manufacturer (With Current NOA)
Paratherm W, Paratherm H	Poyisocyanurate insulation	Siplast
ACFoam II	Polyisocyanurate insulation	Atlas Roofing Corporation
H–Shield	Polyisocyanurate insulation	Hunter Panels
DensDeck Prime	Water resistant gypsum	Georgia-Pacific Gypsum LLC
SECUROCK Gypsum-Fiber Roof Board	Rigid gypsum based board	United States Gypsum Corporation

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product	Description	Dimension	Manufacturer (With Current NOA)
1.	Parafast PA	Pre–Assembled Parafast Fastener and Parafast 3" Metal Plate	#12 x 8" max. length; #3 Phillips Head & 3" round plate	Siplast
2.	Parafast Roofing Fastener	Phillips head, modified buttress thread, carbon steel fastener for use in steel or wood decks. With CR-10 coating. Available with a pinch point or drill point.	#12 x 8" max. Length, #3 Phillips head.	Siplast
3.	Parafast 125 Tri Rib Plates	Round galvalume plated steel stress plate with reinforcing ribs for use with Parafast fasteners.	3" round	Siplast
4.	OMG #12 Standard Roofgrip Fastener	Phillips head, modified buttress thread, carbon steel fastener for use in steel or wood decks. With CR-10 coating. Available with a pinch point or drill point.	#12 x 8" max. Length, #3 Phillips Head	OMG, Inc.
5.	OMG 3" Ribbed Galvalume Plate	Round galvalume plated steel stress plate with reinforcing ribs for use with OMG fasteners.	3" round	OMG, Inc.
6.	Dekfast #15 HS	Truss Head, modified BP type, self-drilling point, 13 threads per inch, carbon fastener for use on concrete, steel and wood decks. With Sentri (black) coating.	# 15 dia. x 14" max. length; #3 Phillips modified truss head.	SFS Intec, Inc.
7.	Dekfast Galvalume Steel Hex	Steel, Galvalume AZ50 stress plate for use with all Dekfast fasteners.	2 7/8" x 3 ¼" x 0.018"	SFS Intec, Inc.

APPROVED FASTENERS: (CONTINUED)

TABLE 3

Fastener Number	Product	Description	Dimension	Manufacturer (With Current NOA)
8.	OMG XHD Fastener	Truss head, self-drilling, pinch point, high thread fastener for use in wood, steel or concrete decks.	#15 x 16"max. length; #3 Phillips Head	OMG, Inc.
9.	OMG 2 ¾" Super XHD Barbed Plate	Round galvanized steel stress plates for use with OMG fasteners.	2 ¾" round	OMG, Inc.

EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Test Name	Date
Factory Mutual	3029275	FM 4470	03/24/08
	3027962	FM 4470	10/03/06
	3042750	FM 4470	01/20/12
Trinity| ERD	C8500SC.11.07	TAS 117–B / ASTM D6862	11/30/07
	C8500SC.11.07-R1	TAS 117–B / ASTM D6862	08/07/09
	S9000.03.09–R1	Physical Properties G155/D638 ASTM D1929/D2843/D635 TAS 114–D/ TAS 114–J	05/06/09
	S31630.05.10	ASTM D6163	05/11/10
	S31450.03.10	ASTM E154 / E96	03/22/10
	SPL-SC6940.06.15	PMMA Physical Properties	06/18/15
Momentum Technologies, Inc.	TX31G6A	Physical Properties	08/19/09
PRI Construction Materials Technologies, LLC.	SRI-039-02-01	ASTM D6163	11/20/12
	SRI-041-02-01	ASTM D6164	11/15/12
	SRI-087-02-01	Physical Properties	02/26/16

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

Engineer/Agency	Identifier	Assemblies:	Date
FM Approval Deck Limitations	N/A	C(1), C(2), D(1), D(2)	01/01/13

APPROVED ASSEMBLIES:

Membrane Type: Liquid Applied Membrane

Deck Type 2I: Steel Decks, Insulated

Deck Description: Minimum 18–22 ga., 1.5" deep, wide rib, ASTM A653 or A1008 SS, Grade 80 steel decking attached to a minimum ¼" thick steel supports spaced at a maximum 6' o.c. using ITW Buildex Teks 5 fasteners spaced at a maximum 6" o.c. at the supports and with side laps attachment using ITW Buildex Teks 1 fasteners at a maximum spacing of 30" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submittted Table.

System Type C(1): All layers of insulation mechanically fastened to roof deck. Membrane is subsequently adhered to the roof insulation.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Insulation Layer:	**Insulation Fasteners Table 3**	**Fastener Density/ ft²**
AC Foam II, Paratherm W Minimum: 1.5" thick	**6 & 7**	**1:2 ft²**

Note: All layers shall be simultaneously fastened; see above for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

Primer: (Optional) Apply Pro Primer R Resin to insulation at a minimum rate of 0.082 lb/ft².

Membrane: Base coat of Parapro Roof Membrane Resin roller applied at a minimum rate of 0.42 lb/ft² onto primer or insulation; followed by one ply of Pro Fleece laid in the wet base coat; followed by a top coat of Parapro Roof Membrane Resin roller applied at a minimum rate of 0.27 lb/ft² onto the embedded Pro Fleece.

Maximum Design Pressure: **–52.5 psf.** (See General Limitation #7)

Membrane Type: Liquid Applied Membrane

Deck Type 2I: Steel Decks, Insulated

Deck Description: Minimum 22 gauge, grade 33 steel decking attached to minimum ¼" thick steel supports spaced maximum 64" o.c. using two ITW Buildex Traxx/5 fasteners and ¾" diameter washers spaced at a maximum 6" o.c. at the supports (two fasteners and washers installed at each bearing attachment point) and with side laps attachment using ITW Buildex Traxx/1 fasteners at a maximum spacing of 12" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submittted Table.

System Type C(2): All layers of insulation mechanically fastened to roof deck. Membrane is subsequently adhered to the roof insulation.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Insulation Base Layer:	**Insulation Fasteners Table 3**	**Fastener Density/ ft²**
H-Shield, Paratherm H Minimum: 1.5" thick	**N/A**	**N/A**
Insulation Top Layer:	**Insulation Fasteners Table 3**	**Fastener Density/ ft²**
DensDeck Prime Minimum: ½" thick	**1 or 2 or 4 & 3 or 5**	**1:1 ft²**

Note: All layers shall be simultaneously fastened; see top layer above for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

Base Sheet: Paradiene 20 TG P base membrane is torch adhered to DensDeck Prime.

Membrane: Base coat of Parapro Roof Membrane Resin roller applied at a minimum rate of 0.42 lb/ ft² onto the Paradiene 20 TG P; followed by one ply of Pro Fleece laid in the wet base coat; followed by a top coat of Parapro Roof Membrane Resin roller applied at a minimum rate of 0.27 lb/ft² onto the embedded Pro Fleece.

Maximum Design Pressure: **–105 psf.** (See General Limitation #7)

Membrane Type: Liquid Applied Membrane

Deck Type 2I: Steel Decks, Insulated

Deck Description: Minimum 22 ga., 1.5" deep, wide rib, ASTM A653 or A1008 SS, Grade 80 steel decking, attached to minimum ¼" thick steel supports spaced at a maximum 6' o.c. using 2 ITW Buildex Traxx 5 fasteners and ¾" steel washers spaced at a maximum 6" o.c. at the supports (two fasteners and washers installed at each bearing attachment point) and with side laps attachment using ITW Buildez Traxx 1 fasteners at a maximum spacing of 12" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submittted Table.

System Type D(1): All layers of insulation to be loose laid on roof deck with preliminary fastening. Base sheet is mechanically attached through all layers of insulation to the roof deck. Membrane is subsequently fully adhered to the roof insulation.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Insulation Base Layer:	**Insulation Fasteners Table 3**	**Fastener Density/ ft²**
AC Foam II, Paratherm W Minimum: 2" thick	**N/A**	**N/A**
Insulation Top Layer:	**Insulation Fasteners Table 3**	**Fastener Density/ft²**
SECUROCK Gypsum-Fiber Roof Board Minimum: ¼" thick	**8**	**N/A**

Note: Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Top layer shall receive preliminary fastening as specified in RAS 117 then Base sheet shall be mechanically fastened as described below.

Base Sheet: Paradiene 20 PR base sheet is mechanically fastened through insulation layers to the deck with OMG XHD Fasteners and OMG 2 ¾" Super XHD barbed stress plates spaced 12" o.c. through the 4" wide side lap and spaced 12" o.c. along one staggered intermediate row in the field of the sheet. The side laps of the base membrane are torch adhered prior to fastening through the side laps.

Ply Sheet: Paradiene 20 TG P torch adhered to the base sheet.

Membrane: Base coat of Parapro Roof Membrane Resin roller applied at a minimum rate of 0.42 lb/ft² onto ply sheet; followed by one ply of Pro Fleece laid in the wet base coat; followed by a top coat of Parapro Roof Membrane Resin roller applied at a minimum rate of 0.27 lb/ft² onto the embedded Pro Fleece.

Maximum Design Pressure: **–135 psf.** (See General Limitation #7)

Membrane Type: Liquid Applied Membrane

Deck Type 2I: Steel Decks, Insulated

Deck Description: Minimum 22 ga., 1.5" deep, wide rib, ASTM A653 or A1008 SS, Grade 80 steel decking, attached to minimum ¼" thick steel supports spaced at a maximum 6' o.c. using 2 ITW Buildex Traxx 5 fasteners and ¾" diameter steel washers spaced at a maximum 6" o.c. (two fasteners and washers are installed at each bearing attachment point) and with side laps attachment using ITW Buildex Traxx 1 fasteners at a maximum spacing 12" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submittted Table.

System Type D(2): All layers of insulation to be loose laid on roof deck with preliminary fastening. Base sheet is mechanically attached through all layers of insulation to the roof deck. Membrane is subsequently fully adhered to the roof insulation.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Insulation Base Layer:	**Insulation Fasteners Table 3**	**Fastener Density/ft²**
AC Foam II, Paratherm W Minimum: 2" thick	**N/A**	**N/A**
Insulation Top Layer:	**Insulation Fasteners Table 3**	**Fastener Density/ft²**
SECUROCK Gypsum-Fiber Roof Board Minimum: ¼" thick	**8**	**N/A**

Note: Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Top layer shall be walked into and adhered to Base Insulation Panels with Para-Stik Roofing adhesive or Dow Chemical Insta-Stik Roofing Adhesive applied at ¾" to 1" wide ribbons with 6" o.c. spacing. Panels shall be allowed to set up and shall receive preliminary fastening as specified in RAS 117 then Base sheet shall be mechanically fastened as described below.

Base Sheet: Paradiene 20 PR base sheet is mechanically fastened through insulation layers to the deck with OMG XHD Fasteners and OMG 2 ¾" Super XHD barbed stress plates spaced 12" o.c. through the 4" wide lap and spaced 12" o.c. along three staggered intermediate rows in the field of the sheet. The side laps of the base membrane are torch adhered prior to fastening through the side laps.

Ply Sheet: Paradiene 20 TG P torch adhered to the base sheet.

Membrane: Base coat of Parapro Roof Membrane Resin roller applied at a minimum rate of 0.42 lb/ft² onto ply sheet; followed by one ply of Pro Fleece laid in the wet base coat; followed by a top coat of Parapro Roof Membrane Resin roller applied at a minimum rate of 0.27 lb/ft² onto the embedded Pro Fleece.

Maximum Design Pressure: **–150 psf.** (See General Limitation #7)

STEEL DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117, calculations shall be signed and sealed by a Florida Registered Professional Engineer, Registered Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs/100 ft^2., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs/100 ft^2.
   Note: Spot attached systems shall be limited to a maximum design pressure of –45 psf.
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida Registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE